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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/798,768	03/11/2004	Clifford L. Smith		6437
36347	7590	09/12/2006		
LAW OFFICE OF CRAIG BOHN 2134 BRANARD STREET HOUSTON, TX 77098			EXAMINER TUROCY, DAVID P	
			ART UNIT	PAPER NUMBER
			1762	

DATE MAILED: 09/12/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/798,768

Applicant(s)

SMITH, CLIFFORD L.

Examiner

David Turocy

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

1. Applicant's amendments, filed 7/12/2006, have been fully considered and reviewed by the examiner. The examiner notes the amendment to claim 1. Claims 1-16 remain pending in the instant application.

Response to Arguments

2. Applicant's arguments filed 7/12/2006 have been fully considered but they are not persuasive.

The applicant has argued against the combination of Watson and Oshima, arguing Watson discloses providing a noble metal over a nickel alloy and Oshima teaches of a nickel alloy. The examiner agrees that Watson does disclose a coating a noble metal onto a nickel coating; however, the examiner disagrees with the applicant's assertion that Oshima is directed to the same nickel alloy coatings. However, Watson discloses zinc and any other corrosive resistant materials are operable for forming the "noble metal" layer and Oshima discloses a corrosive resistant zinc-nickel alloy, exemplifies 90:10 zinc to nickel alloy (examples), and therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Watson to use the zinc-nickel electroplated layer as suggested by Oshima to provide a desirable corrosion resistant coating on a metallic article because Oshima discloses zinc-nickel alloy electroplated layer on metallic articles is known in the art to improve the corrosion

resistance properties and therefore would reasonably be expected to effectively provide corrosion resistance for equipment parts.

The applicants arguments with respect to the declaration under 37 CFR 1.132 filed 9/13/2005, are not found persuasive and the examiner maintains the position that the declaration is insufficient to overcome the rejection of claims 1-16 based upon 35 USC 103(a) rejection as set forth in the last Office action because:

The examiner notes the statement of unexpected results and the data provided in support of said statement, however, such a showing is not commensurate in scope with the claims. The claimed feature is electroplated material comprising nickel with a subsequent spray layer, and the declaration discloses unexpected results of a single species of the claimed genus, nickel chrome coating with HVOF topcoat. Therefore the declaration does not provide sufficient evidence of unexpected results over the entire scope of the claims.

The examiner notes the statement of commercial success, however, such statement is not commensurate in scope with the claims, where the claimed feature is electroplated material comprising nickel, and the declaration discloses commercial success of not claimed features of a nickel chrome coating (See MPEP 716.03(a)). In order to be commensurate in scope with the claim, the commercial success must be due to claimed features, rather than features not claimed. *Joy technologies Inc. Vs. Manbeck* 17 USPQ2d 1257, 1260. In addition, the declaration fails to provide proof of establishment of a nexus, i.e. factual evidence, between the claimed invention and commercial success. See MPEP 716.03.

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The examiner notes the statement of long felt need, however, no objective evidence to support such a statement has been provided. The determination of long-felt need is based on (1) the recognition of a problem and (2) the inability to solve the problem. It is unclear what the "long felt need" is and how it is being solved by the claimed invention. It appears as though a species of the claimed invention provides an improvement of durability. However, the problem of serious failure does not appear to be solved but rather delayed a certain portion of time longer. The declaration does not provide objective evidence of the disclosed companies spending huge sums of money and resources to improve durability and therefore such a statement must be deemed merely speculation. See MPEP 716.04.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over DE 3829007 A by Becker et al ('Becker') in view of US Patent 3859061 by Spiers et al. ('Spiers') and further in view of the admitted state of the art as taught from the applicants' description.

As for claim 1-3, Becker discloses coating of a metallic article, such as machining or working tools, with a wear resistant layer of a hard material, by plasma arc process after the article is plated with nickel prior to plasma spraying. Becker discloses electroless plating of nickel but fails to disclose electroplating nickel. However, Spiers, teaching of a corrosion resistant, discloses nickel layer be applied by electroplating from a nickel sulfamate or using an electroless nickel bath. Therefore Spiers discloses electroless plating and electroplating nickel are known equivalents for deposition of a corrosive resistant nickel coatings. Substitution of equivalents requires no express motivation. *In re Fount*, 213 USPQ 532 (CCPA 1982); *In re Siebentritt* 152, USPQ (CCPA 1967).

Alternatively, Spiers discloses two methods for forming a nickel layer on a substrate and therefore it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Becker to use electroplating with a reasonable expectation of successfully providing a nickel corrosive resistant layer. The prior art can be modified or combined to reject claims as prima facie obvious as long as there is a reasonable expectation of success. *In re Merck & Co., Inc.*, 800 F.2d 1091, 231 USPQ 375.

Becker in view of Spiers fails to teach of a preparing the tool service area. The admitted state of the art as taught from the applicants description teaches that the "typical plating process consists of preparation of the item to be plated" which may include one or more of cleaning, grinding, stripping, polishing, blasting, and baking (Background of Invention, pg 2, lines 7-20). Therefore, it would have been obvious to

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one skilled in the art at the time of the invention to include a preparation step before plating including such steps as cleaning and abrading the tool service area with the expectation it helps improve adhesion of layer.

As for claim 4-6 and 8, Becker in view of Spiers is discussed above. Becker in view of Spiers fails to teach of a transitional finishing step at the end of the plating process. The admitted state of the art as taught from the applicants description teaches that typical plating is post-plate finished which may include one or more of cleaning, grinding, polishing, super-finishing, blasting, baking, and inspection (Background of Invention, pg 2, lines 7-20). Therefore, it would have been obvious to one skilled in the art at the time of the invention to include a transitional finishing step including abrading, baking and a transitional evaluating step.

As for claim 7 and 11, Becker in view of Spiers is discussed above. Becker in view of Spiers fails to teach of subsequent plating step or a subsequent spraying step. It is the examiners position that it would have been obvious to one skilled in the art at the time of the invention to apply multiple plating or spraying layer with the expectation of creating a thicker coating to, provide a more durable coating and meet any thickness requirements. Additionally, the admitted state of the art teaches that multiple layers of spray coating may be applied to create a desired thickness (Background of Invention, pg 3 lines 16-18).

As for claim 9, 10, and 12-16, Becker in view of Spiers is discussed above. Becker in view of Spiers fails to teach of finishing steps at the end of the spraying process. The admitted state of the art as taught from the applicants description teaches

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that typical spraying is post-spray finished with one or more of cleaning, grinding, polishing, super-finishing, blasting, baking, and inspection (Background of Invention, pg 2 lines 21-23, pg 3 lines 1-18). Therefore, it would have been obvious to one skilled in the art at the time of the invention to include a conventional transitional finishing step including abrading, baking and inspecting the layer. Additionally, it would have been obvious to one skilled in the art at the time of the invention to include a finishing step after the spraying step that includes cleaning, polishing, and evaluating.

5. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6073648 by Watson et al ("Watson") in view of Spiers and further in view of the admitted state of the art as taught from the applicants' description.

Claims 1-3, Watson discloses coating equipment with an electroplated layer with corrosive resistant material (Column 1, lines 23-25, Column 2, lines 38-46, Figure 1). Watson discloses a metal substrate having a nickel layer (Column 3, lines 4-5). Watson disclose electroplating, Watson discloses applying an overcoat by spraying (Column 4, lines 61-64).

Watson fails to teach applying an electroplating layer is nickel. However, Spiers, teaching of a corrosive coating, discloses a metal substrate is known in the art to be electroplated with nickel (Column 6, lines 21-24).

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Watson to apply the nickel coating as a electroplated layer as suggested by Spiers to provide a desirable coating on a metallic article

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because Spiers discloses nickel electroplated layer on metallic articles is known in the art to improve the corrosion resistance properties and therefore would reasonably be expected to effectively provide corrosion resistance for equipment parts prior to the deposition of the noble metal in Watson.

Since the claim language is open, i.e. comprising, the claims are open to other process steps, such as electroplating noble metal between the nickel and spraying layer. The examiner notes the limitation of spraying one layer of spraying coating material to said layer of plating coating material, however, the claim is not limited to direct application and therefore an intermediate layer is not excluded.

Watson in view of Spiers fails to teach of a preparing the tool service area. The admitted state of the art as taught from the applicants description teaches that the "typical plating process consists of preparation of the item to be plated" which may include one or more of cleaning, grinding, stripping, polishing, blasting, and baking (Background of Invention, pg 2, lines 7-20).

Therefore, it would have been obvious to one skilled in the art at the time of the invention to include a preparation step before plating including such steps as cleaning and abrading the tool service area with the expectation it helps improve adhesion of layer.

Claims 4-6 and 8, Watson in view of Spiers is discussed above. Watson in view of Spiers fails to teach of a transitional finishing step at the end of the plating process. The admitted state of the art as taught from the applicants description teaches that

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typical plating is post-plate finished which may include one or more of cleaning, grinding, polishing, super-finishing, blasting, baking, and inspection (Background of Invention, pg 2, lines 7-20).

Therefore, it would have been obvious to one skilled in the art at the time of the invention to include a transitional finishing step including abrading, baking and a transitional evaluating step.

Claims 7 and 11, Watson in view of Spiers is discussed above. Watson in view of Spiers fails to teach of subsequent plating step or a subsequent spraying step.

It is the examiners position that it would have been obvious to one skilled in the art at the time of the invention to apply multiple plating or spraying layer with the expectation of creating a thicker coating to, provide a more durable coating and meet any thickness requirements. Additionally, the admitted state of the art teaches that multiple layers of spray coating may be applied to create a desired thickness (Background of Invention, pg 3 lines 16-18).

Claims 9, 10, and 12-16, Watson in view of Spiers is discussed above. Watson in view of Spiers fails to teach of finishing steps at the end of the spraying process. The admitted state of the art as taught from the applicants description teaches that typical spraying is post-spray finished with one or more of cleaning, grinding, polishing, super-finishing, blasting, baking, and inspection (Background of Invention, pg 2 lines 21-23, pg 3 lines 1-18).

Therefore, it would have been obvious to one skilled in the art at the time of the invention to include a conventional transitional finishing step including abrading, baking and inspecting the layer. Additionally, it would have been obvious to one skilled in the art at the time of the invention to include a finishing step after the spraying step that includes cleaning, polishing, and evaluating.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Turocy whose telephone number is (571) 272-

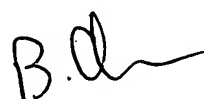
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2940. The examiner can normally be reached on Monday-Friday 8:30-6:00, No 2nd Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on (571) 272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

David Turocy
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BRET CHEN
PRIMARY EXAMINER